

# TC1026P

## Multi channel CAN FD and LIN bus interface



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### Classic Application:

- Whole vehicle multi channel CAN FD/CAN bus data acquisition
- Domain controller testing
- Various automated testing systems

## Feature Overview

TC1026P is a multi channel CAN FD and LIN bus interface device launched by TOSUN. It supports CAN FD bus speeds up to 8 Mbps and LIN speeds from 0 to 20 kbps. The product connects to the PC via a USB 2.0 interface and features a driver-free design for Windows systems, ensuring excellent system compatibility.

With the powerful TSMaster software, the device supports loading DBC and ARXML database files, making it easy to monitor, analyze, and simulate CAN FD/LIN bus data. It also supports UDS diagnostics, ECU programming, and CCP/XCP calibration.

The device provides secondary development APIs for Windows and Linux, supporting various development environments such as C++, C#, LabView, and Python, making it convenient to integrate into various testing systems, offering high efficiency and ease of use.

## Characteristics

- Automotive-grade design, supports LDF, dbc files, a2l files, blf files, asc files, and arxml files
- Adjustable CAN channel baud rate from 125Kbps to 1Mbps, CAN FD supports up to 8Mbps
- The power supply for this product offers two options: internal power supply and external power supply. If internal power supply is selected, the maximum output voltage provided by the product is 12V. If external power supply is selected, it can accept a voltage of up to 36V.
- Supports data logging and offline/online playback in blf and asc formats
- Supports UDS diagnostics and CCP/XCP calibration
- Supports UDS-based Flash Bootloader
- Supports UDS diagnostics over LIN bus
- Supports information security testing
- Supports secondary development interfaces for Windows and Linux systems
- Supports all paid licenses for TSMaster software

## Specification

Channel	6 x LIN, 1 x CAN FD
PC End	USB 2.0
CAN / LIN End	DB9 interface
Driver	Driver-free design for Windows and Linux systems, ensuring system compatibility
Buffer	Each channel supports a transmit buffer of up to 1000 CAN frames
CAN	Supports CAN 2.0A, B protocols, compliant with ISO11898-1 standard, with baud rate 125Kbps-1Mbps
CAN FD	Supports CAN FD that complies with both ISO and non-ISO standards, with baud rates from 125Kbps to 8Mbps
LIN	Supports LIN 1.3 and LIN 2.x, baud rate 0-20Kbps
Schedule Table	Supports LDF files and can run schedule tables; also allows custom schedule table configuration
Timestamp	1 $\mu$ s hardware message timestamp
Termination Resistor	Built-in 120-ohm termination resistor, software configurable
Messages Sent per Second*	Maximum 20,000 frames/second
Messages Received per Second*	Maximum 20,000 frames/second
Isolation	CAN channel isolated at DC 2500V, with ESD protection of $\pm$ 4KV (contact discharge) and $\pm$ 8KV (air discharge)
Power Supply	USB powered; external power required for LIN communication
Power Consumption	2.5W
Casing Material	Metal
Dimensions	108 x 91 x 35mm
Weight	Approximately 252g (without packaging) / approximately 699g (with packaging)
Operating Temperature	-40°C ~ 80°C
Operating Humidity	10% to 90% (non-condensing)
Operating Environment	keep away from corrosive gases

\*Single channel at 1 Mbps with a 0-byte data field

## Ordering information

Product Name	Model Number	Function Description
Network Device	TC1026P	1 channel CAN FD, 6 channel LIN

## Shipping list

- TC1026 device
- USB Cable\*1
- DB9 female connector to  
9 banana plugs LIN bus cable\*2

## Pin definition

Left : LIN 4/5/6 Middle : LIN 1/2/3 Right : CAN FD

